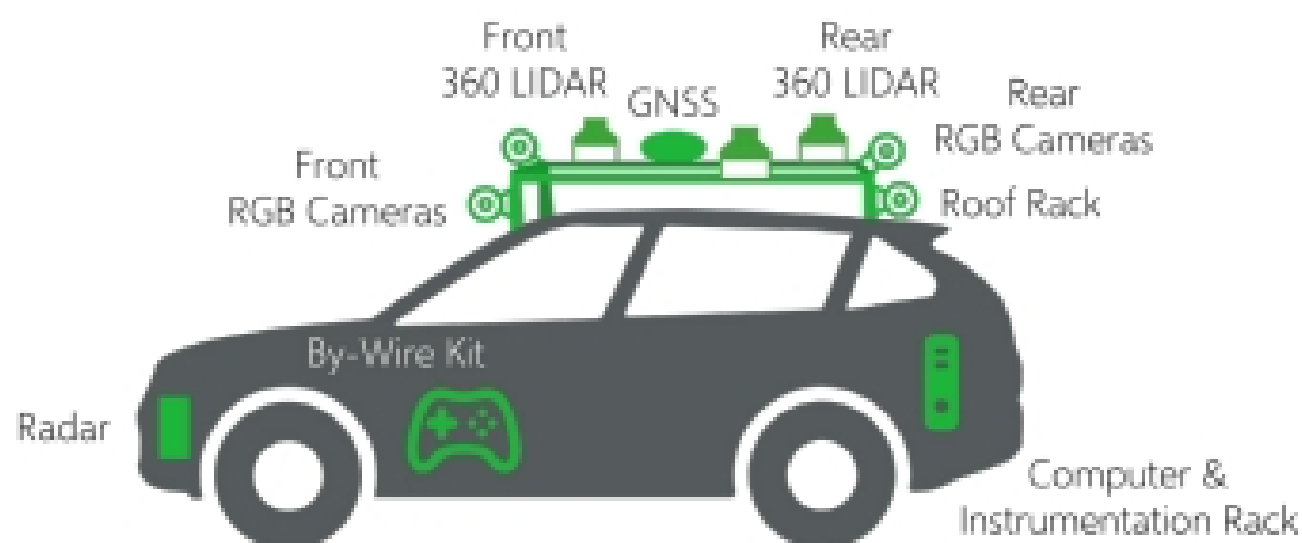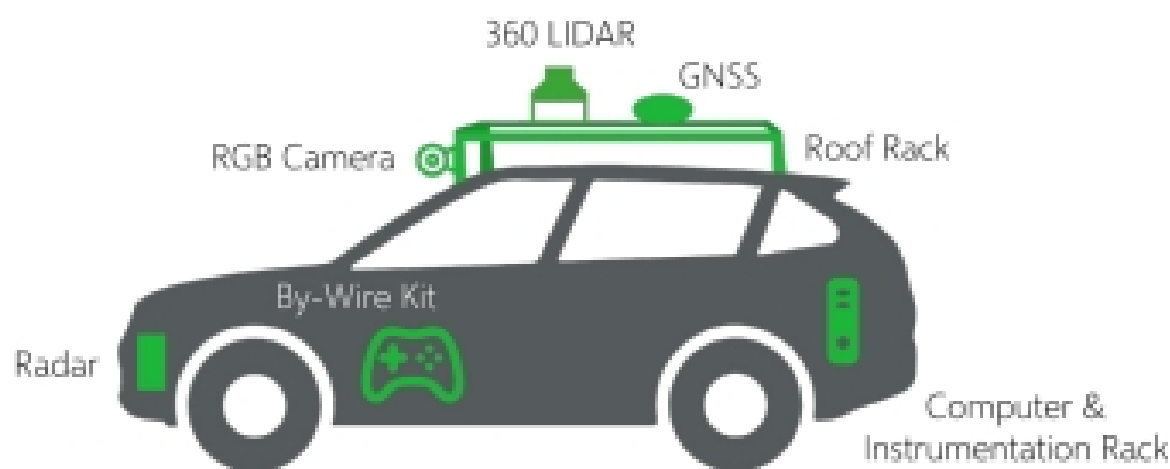# Kinetic Kits

These innovative packages offer institutions and companies reliable and flexible platforms that feature industry-leading hardware and software for autonomous vehicle (AV) research and development. With the influx of driverless technology providers over recent years, it is often overwhelming for teams to navigate the seemingly endless options. Dataspeed Kinetic Kits were developed to streamline the AV hardware and software selection process to allow teams to focus their efforts on their own research and testing. Every component was hand-selected by the experienced Dataspeed engineering team based on extensive industry knowledge and experience. Included software functionality was developed in-house to allow for project adaptability and expandability.

Kinetic Beginner Kit

Outfits production vehicles with the fundamental technologies to begin collecting data and developing essential autonomous functionality
• Ideal for universities and startup teams just beginning research and testing

Kinetic Intermediate Kit

Retrofits production vehicles with a sensor suite needed to successfully record and playback a manually driven route or to follow waypoint inputs
• Has the capability to detect and stop for objects
• Ideal for teams looking to test within predetermined areas or for performing technology demonstrations

Kinetic Advanced Kit

• Designed to propel production vehicles into the forefront of autonomous innovation
• Empowers advanced users with cutting-edge technologies, elevating research and testing endeavors to unprecedented levels of sophistication and precision

Kinetic Kit Packages	Beginner	Starter	Intermediate
Hardware			
Dataspeed By-Wire System	x	x	x
Ouster OS1-64 Lidar (1 unit) / Advanced (3 units)		x	x
Long Range Radar (1 unit)		x	x
LUCID Vision Labs RGB Camera (1 unit) / Advanced (4 units)		x	x
OxTS INS (1 unit with dual antennas)			x
Neousys Computing Platform (1 unit)		x	x
Sensor Mounting & Storage Systems		x	x
Hardware Compatible for Use with Autoware		x	x
Software			
Turnkey Development Environment for ROS 2		x	x
Sensor Calibration Tool		x	x
Object Detection & Avoidance			x
NavRoute™ Path Following			x
Engineering Services			
Mechanical & Electrical Integration		x	x
Sensor Calibration		x	x
Initial Training & Support		x	x

Optional Add-ons

Sensor Mounting Options:

Bumper Bars

Custom Mounting Solutions

Sensors:

Infrared Cameras

Solid State Lidars

Ultrasonic Sensors

Remote Operations & Emergency Stop:

Infrared Cameras

Solid State Lidars

Ultrasonic Sensors

Power:

Shore Power System

Secondary Batteries

DC Power Conversion System

Engineering Services:

Custom Integrations

Sensor Perception Coverage Mapping

Accelerate Autonomy with Dataspeed

Dataspeed is the leader in autonomous vehicle development, providing autonomy-ready vehicle platforms and Drive-by-Wire systems for on-road and off-road applications across defense, automotive, industrial, and academic research. Trusted in demanding environments, Dataspeed helps teams move faster, reduce integration risk, and bring autonomy to life while helping define the standard for scalable autonomy.